

WHAT IS CLAIMED IS:

1. A CDMA cellular communication system which is a CDMA cellular communication system allocating a same code to a first base station, a second base station and a third base station installed at intervals, wherein the first base station comprises:

a transmission interrupting unit for interrupting signal transmission from the first base station; and

a signal detecting unit for carrying out signal detection by despreading a reception signal by a code allocated to the first base station;

wherein overreach from the second base station is detected in a time period of interrupting transmission from the first base station.

2. The CDMA cellular communication system according to Claim 1:

wherein the signal detecting unit includes a correlation observation window previously determined based on an installation interval between the first and the second base stations and signal detection is carried out within the correlation observation window.

3. The CDMA cellular communication system according to Claim 1:

wherein the first base station includes two or more of directional antennas in correspondence with sectors and

determines a source of generating overreach in either of the second base station and the third base station based on the sector at which the overreach is detected.

4. The CDMA cellular communication system according to Claim 1:

wherein the first base station determines a source of generating the overreach based on a code timing in signal detection.

5. A CDMA base station apparatus comprising:

a transmission unit for generating a transmission signal by spread modulation using a predetermined code;

a signal detecting unit for carrying out signal detection by despreading a reception signal by the code; and

a transmission interrupting unit for interrupting signal transmission from a station of the CDMA base station apparatus;

wherein the signal detecting unit detects a transmission signal from other station allocated with the code during a time period of transmission interruption by the transmission interrupting unit.

6. The CDMA base station apparatus according to Claim 5:

wherein the transmission unit uses the code synchronized with a reference timing and the signal detecting unit includes a predetermined correlation observation window having a previously provided shift of a timing relative to the reference

timing and carries out the signal detection within the correlation observation window.

7. The CDMA base station apparatus according to Claim 5:

wherein the transmission unit uses the code synchronized with a reference timing and the signal detecting unit calculates a distance to the other station based on the reference timing and a code timing in the signal detection.

8. The CDMA base station apparatus according to Claim 5:

wherein the transmission interrupting unit is means for stopping transmission power during a time period of interrupting transmission by a location service.

9. The CDMA base station apparatus according to Claim 5:

wherein the transmission interruption unit is means for stopping transmission power during a time period of interrupting transmission by a compressed mode.

10. A method of detecting overreach which is a method of detecting overreach in a CDMA base station apparatus, said method comprising:

a transmission step of transmitting a signal generated by spread modulation using a code allocated to a station of the CDMA base station apparatus;

a transmission interrupting step for interrupting signal

transmission from the station; and
a signal detecting step of carrying out signal detection by
despreading a reception signal by using the code during a time
period of interrupting transmission of the station.